adjusted life years (QALYs), and incremental cost-effectiveness ratio (ICER) was calculated. As Japanese Ministry of Health, Labour and Welfare has not yet approved abiraterone due to the delay in development, the drug cost was estimated based on prices in four other countries. In the present study, resource use was estimated using a Japanese claim data set with 2000 claim data of prostate cancer patients from 2007 to March 2013. Both cost analysis and probabilistic sensitivity analysis were performed using a 2% annual rate. RESULTS: The result of this study revealed that abiraterone plus prednisolone indicated higher QALYs than prednisolone alone. In the base-case analysis, ICER for abiraterone plus prednisolone was $17 million (though roughly EUR 120,000) per QALY gained. One-way sensitivity analysis for the price of abiraterone influenced ICER (JPY 12.5 - 21 million). CONCLUSIONS: The present study suggested that the ICER is more than JPY 10 million. Further elaborate discussion on cost-effectiveness of abiraterone in Japan is needed to consider the Japanese price and clinical outcomes.

PCN104
USE OF PSA SLOPE TO GUIDE ADJUVANT RADIOTHERAPY IN POST-PROSTATECTOMY PROSTATE CANCER HAS POTENTIAL TO BE COST EFFECTIVE Seed KE1,2, Biehn Stewart S.3,5,
1Duke Clinical Research Institute, Durham, NC, USA, 2Duke University School of Medicine, Durham, NC, USA
OBJECTIVES: NADIA ProsVue is a prognostic system developed to identify men at lower risk for clinical recurrence of prostate cancer following radical prostatectomy, as indicated by a prostate-specific antigen (PSA) slope <~2 pg/mL/month. We evaluated the potential cost-effectiveness of using the prognostic system to guide adjuvant radiotherapy (ART) in men considered to be at intermediate- or high-risk for recurrence on the CAPRA-S system.
METHODS: We developed a decision analytic model consisting of a decision tree to stratify men into risk groups and a state transition model to generate long-term costs and outcomes. We displayed model parameters using patient-level data from the product’s registration study, the medical literature and other sources. We conducted probabilistic, one-way and two-way sensitivity analyses to examine the cost-effectiveness of the system in ART among men identified as having a low risk of recurrence (i.e. with PSA slope findings).
RESULTS: The cost-effectiveness of a PSA slope-guided strategy varied widely due to small differences in QALYs at 10 years. Assuming that 20% of men in the intermediate-risk CAPRA-S group receive ART with standard care, the incremental cost-effectiveness ratio (ICER) is less than $50,000 per QALY when use of ART is less than 8.2% among men with PSA slopes <~2 pg/mL/month. Assuming that 40% in the high-risk CAPRA-S group receive ART with standard care, ART would have to decrease to at least 11.5% among men with PSA slopes <~2 pg/mL/month to achieve an ICER less $50,000 per QALY. ICERS were also sensitive to varying the costs of the prognostic system and ART, varying the benefits of salvage therapy and utility weights for ART toxicities. CONCLUSIONS: The ProsVue system has the potential to be cost-effective, but more data will be dependent on the magnitude of reduction in ART among men identified as having a low risk of recurrence.

PCN105
COST-EFFECTIVENESS OF CETUXIMAB AS FIRST-LINE TREATMENT FOR METASTATIC COLORECTAL CANCER IN THE UNITED STATES Ortenzal JD1,2,3, Bergley TG1, Anene A.M.4,5 Biehn Stewart S.3,5, Bolander B.3,4
1Partnership for Health Analytic Research, LLC, Beverly Hills, CA, USA, 2Bristol-Myers Squibb, Plainsboro Township, NJ, USA
OBJECTIVES: To evaluate the clinical and economic tradeoffs associated with FOLOTHERAPEUTICS cetuximab therapy or bevacizumab monotherapy as first-line bevacizumab or cetuximab therapy as first-line treatment for patients with metastatic colorectal cancer (mCRC). The model will type (WT) metastatic colorectal cancer (mCRC) patients, through a cost-effective analysis incorporating the tradeoffs associated with FOLOTHERAPEUTICS’ cetuximab. METHODS: A deterministic model was developed to project lifetime costs and benefits of FOLOTHERAPEUTICS’ cetuximab or bevacizumab therapy. A cohort of 1,000 patients faced risks of adverse events, progression to 2nd-line treatment, or eligibility for 3rd-line treatment, or for ART patients, the time horizon was cost-utility from a societal perspective. The QALY was calculated as 2013 US$ per life-year (LY) and per quality-adjusted life-year (QALY). We conducted a scenario analysis to analyze the subset of RAS WT patients. The impact of parameter uncertainty was also evaluated with one-way and probabilistic sensitivity analyses. RESULTS: Compared with 1st-line bevacizumab KRAS WT patients, those treated with cetuximab gained an additional 5.7 months of life (42.9 vs. 37.2) at a cost of $46,301 ($280,933 vs. $234,632), for an ICER of $97,297/LY (JPY 141,140,602 COP for retrospective cohort and prospective cohort -215,449,438 COP). The variable that most impacted the outcome was the incidence of febrile neutropenia (12% for the clinical trial, 60% retrospective cohort and 83% prospective cohort). The results were robust to changes in probability sensitivity analysis. With the data from the clinical trial in 94% of cases using factor was cost effective, while in the Colombian data in 84% and 72% of cases (retrospective and prospective cohort respectively) it was not cost effective for factor. CONCLUSIONS: With Colombian information, the prophylactic use of the factor under chemotherapy induction in adults with ALL turns out to be not cost-effective. The gap in the results suggests a careful extrapolation of information from clinical trials (ideal world) to develop economic evaluations in Colombia, and its impact on decision making.

PCN119
CAN NEXT GENERATION SEQUENCING SAVE LIVES AND PROVIDE A GOOD ECONOMIC VALUE IN COLON CANCER PREVENTION? Gallego G1,2,3, Garrison L2, Jarvik G1, Venneutra DL3
1University of Washington, Seattle, WA, USA, 2School of Pharmacy, University of Washington, Seattle, WA, USA, 3School of Pharmacy, University of Washington, Seattle, WA, USA
OBJECTIVES: Screening of all patients diagnosed with colorectal cancer for Lynch syndrome using a staged testing procedure is currently recommended by Evaluation of Genomic Applications in Practice and Prevention (EGAPP) guidelines. Next generation sequencing (NGS) is a disruptive technology that likely offers improved outcomes, but its value is uncertain. The goal of this study was to evaluate the cost-effectiveness of NGS tumor tissue testing for universal testing of patients with colorectal cancer (CRC) to detect relatives with Lynch syndrome.
METHODS: